

What is claimed is:

1. A method for inhibiting the activation of telomerase, which is selected from the following group:
 - (i) a method for inhibiting the activation of telomerase, comprising inhibiting the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase); and
 - (ii) a method for inhibiting the activation of telomerase, comprising inhibiting the phosphorylation of TERT by active MAPKAPK3.
2. A method for inhibiting the activation of telomerase, comprising inhibiting the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase).
3. A method for inhibiting telomerase activity, comprising using the method for inhibiting the activation of telomerase according to claim 1 or 2.
4. A method for inhibiting telomerase activity by an inactive variant of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3), wherein the variant is a variant that binds to TERT (telomerase reverse transcriptase).
5. The method for inhibiting telomerase activity according to claim 4, wherein the inactive variant of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) is a protein shown by the amino acid sequence set forth in SEQ ID NO: 6 in the sequence listing.
6. A method for preventing and/or treating a disease attributable to the enhanced telomerase activity, comprising using the method for inhibiting the activation of telomerase according to claim 1 or 2 and/or the method for inhibiting telomerase activity according to any one of claims 3 to 5.
7. The method for preventing and/or treating a disease attributable to the enhanced telomerase activity according to claim 6, wherein the disease attributable to the enhanced telomerase activity is a cancer disease.
8. The method for preventing and/or treating a disease attributable to the enhanced telomerase activity according to claim 7, wherein the cancer disease is any of breast cancer, renal cell carcinoma,

acute leukemia, glia cell carcinoma, prostatic cancer, neuroepithelial carcinoma, squamous cell carcinoma, liver cell carcinoma, prostatic cancer, and non-small cell lung cancer.

9. The method for preventing and/or treating a disease attributable to the enhanced telomerase activity according to claim 7, wherein the cancer disease is a breast cancer disease.

10. A method of identifying a compound that inhibits the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase), wherein the method comprises contacting a compound with MAPKAPK3 and/or TERT under a condition allowing the compound to interact with MAPKAPK3 and/or the TERT, introducing a system using a signal and/or a marker that is generated by the binding of MAPKAPK3 to TERT, and detecting the presence, absence or change of the signal and/or the marker, thereby determining whether the compound inhibits the binding of MAPKAPK3 to the TERT.

11. A method of identifying a compound that inhibits the phosphorylation of TERT (telomerase reverse transcriptase) by active MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3), wherein the method comprises contacting a compound with active MAPKAPK3 and/or TERT under a condition allowing the compound to interact with active MAPKAPK3 and/or TERT, introducing a system using a signal and/or a marker that is generated by the phosphorylation of TERT by active MAPKAPK3, detecting the presence, absence or change of the signal and/or the marker, thereby determining whether the compound inhibits the phosphorylation of TERT by active MAPKAPK3.

12. An agent for inhibiting the activation of telomerase, which is selected from the following group:

- (i) an agent for inhibiting the activation of telomerase, comprising inhibiting the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase); and
- (ii) an agent for inhibiting the activation of telomerase, comprising inhibiting the phosphorylation of TERT by active MAPKAPK3.

13. An agent for inhibiting the activation of telomerase, which is selected from the following group:

- (i) an agent for inhibiting the activation of telomerase, comprising at least one compound that inhibits the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase); and
- (ii) an agent for inhibiting the activation of telomerase, comprising at least one compound that inhibits the phosphorylation of TERT by active MAPKAPK3.

14. An agent for inhibiting telomerase activity, which is selected from the following group:

- (i) an agent for inhibiting telomerase activity, comprising inhibiting the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase); and
- (ii) an agent for inhibiting telomerase activity, comprising inhibiting the phosphorylation of TERT by active MAPKAPK3.

15. An agent for inhibiting telomerase activity, which is selected from the following group:

- (i) an agent for inhibiting telomerase activity, comprising at least one compound that inhibits the binding of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) to TERT (telomerase reverse transcriptase); and
- (ii) an agent for inhibiting telomerase activity, comprising at least one compound that inhibits the phosphorylation of TERT by active MAPKAPK3.

16. An agent for inhibiting telomerase activity comprising an inactive variant of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3), wherein the variant is a variant that binds to TERT (telomerase reverse transcriptase).

17. The agent for inhibiting telomerase activity comprising an inactive variant of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3) according to claim 16, wherein the inactive variant of MAPKAPK3 is a protein shown by the amino acid sequence set forth in SEQ ID NO: 6 in the sequence listing.

18. An agent for preventing and/or treating a disease attributable to the enhanced telomerase activity, comprising using the method for inhibiting the activation of telomerase according to claim 1 or 2 and/or the method for inhibiting telomerase activity according to any one of claims 3 to 5.
19. An agent for preventing and/or treating a disease attributable to the enhanced telomerase activity, comprising at least one of the agent for inhibiting the activation of telomerase according to claim 12 or 13 and the agent for inhibiting telomerase activity according to any one of claim 14 to 17.
20. The agent for preventing and/or treating a disease attributable to the enhanced telomerase activity according to claim 18 or 19, wherein the disease attributable to the enhanced telomerase activity is a cancer disease.
21. The agent for preventing and/or treating a disease attributable to the enhanced telomerase activity according to claim 20, wherein the cancer disease is any of breast cancer, renal cell carcinoma, acute leukemia, glia cell carcinoma, prostatic cancer, neuroepithelial carcinoma, squamous cell carcinoma, liver cell carcinoma, prostatic cancer, and non-small cell lung cancer.
22. The agent for preventing and/or treating a disease attributable to the enhanced telomerase activity according to claim 20, wherein the cancer disease is a breast cancer disease.
23. A reagent kit, comprising at least one selected from the group consisting of MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase-3), a polynucleotide encoding MAPKAPK3, a vector containing the polynucleotide, and a transformant containing the vector; and at least one selected from the group consisting of TERT (telomerase reverse transcriptase), a polynucleotide encoding TERT, a vector containing the polynucleotide, and a transformant containing the vector.